

6709

6709

Form 504	
U. S. COAST AND GEODETIC SURVEY	
DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey	Hydrographic
Field No. 81	Office No. H 6709
LOCALITY	
State	South Carolina
General locality	Off shore Atlantic Ocean
Locality	Southeast SE of Cape Romain
194 1	
CHIEF OF PARTY	
C.D. Meaney	
LIBRARY & ARCHIVES	
Jan. 19, 1943	
DATE	

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REG. NO.
H6709

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 81

REGISTER NO. H - 6709 H6709

State SOUTH CAROLINA

General locality OFFshore
ATLANTIC OCEAN

Locality Southeast
SE. OF CAPE ROMAIN

Scale 1:80,000 Date of survey Nov. - Dec., 1941

Vessel LYDONIA

Chief of Party C. D. Meaney

Surveyed by C. D. Meaney
~~Ship's Officers~~

Protracted by M. A. Axelton & E. Cunney

Soundings penciled by M. A. Axelton

Soundings in ~~fathoms~~ feet

Plane of reference M. L. W.

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated Sept. 2, 1939 and Nov. 21, 1941, 19

Remarks: This sheet was processed at the Norfolk Processing
Office.

PRELIMINARY DESCRIPTIVE REPORT
For use of PROCESSING OFFICE
to accompany
HYDROGRAPHIC SHEET REGISTER NO. H6709
Field No. 81
Project HT-240 South Carolina Coast
Ship LYDONIA C. D. Meaney, Commanding
1941

INSTRUCTIONS:

The work on this sheet was executed in accordance with The Director's Instructions dated September 2, 1939, and Supplemental Instructions dated November 21, 1941.

LOCATION AND LIMITS:

The area of this sheet lies south of Georgetown, South Carolina and is roughly bounded by four corners as follows: Lat. $32^{\circ} 58'$, Long. $79^{\circ} 11'$, in the northwest; Lat. $32^{\circ} 57'$, Long. $78^{\circ} 43'$, in the northeast; Lat. $32^{\circ} 42'$, Long. $78^{\circ} 44'$, in the southeast; and Lat. $32^{\circ} 40'$, Long. $79^{\circ} 11'$, in the southwest.

SCALE:

The scale of this sheet is 1 : 80,000. ✓

CONTROL:

Control for this survey was furnished by buoys located by sun azimuth and taut wire traverses. Three point fixes and sun azimuths were observed on triangulation stations to locate the buoys at the inner end of the traverses. All positions are on the North American 1927 Datum. ✓

A separate report has been submitted on control. ✓

SURVEY METHODS:

Sounding lines were controlled by Radio Acoustic Ranging from sono-radio buoys except in the immediate vicinity of the buoy lies where visual fixes were observed. ✓

Soundings were taken with the Dorsey Fathometer except for a few minutes on November 10, 1941, when it was out of order and the Portable Depth Recorder (Type 808) was used. ✓

For fathometer corrections, see the report accompanying the tabulations and computations of fathometer corrections. ✓

INCOMPLETE WORK:

Upon receipt of Supplemental Instructions dated November 21, 1941, work was discontinued on this sheet. The area as bounded in the paragraph "Location and Limits" has been completed but near the fringes of this area the spacing of lines does not conform to the instructions. ✓

RECORDS:

Tidal reducers and fathometer corrections have been entered and checked. All soundings have been reduced and checked. ✓

RECORDS: (Continued)

The chronograph tapes are being forwarded along with the other records. The scaling has not been checked. ✓

MISCELLANEOUS:

Discrepancies, Dangers, Comparison with Previous Surveys, Comparison with Charts, and Junctions are subjects that may be described after the smooth hydrographic sheets are plotted. ✓

Respectfully submitted,

H. C. Applequist

H. C. Applequist,
Lieut. (jg) C&GS.

Approved, forwarded:

C. D. Meaney

C. D. Meaney,
Lieutenant, C&GS,
Commanding Ship LYDONIA.

STATISTICS
HYDROGRAPHIC SHEET REGISTER NO. H6709
Project HT-240 So. Carolina Coast
Ship LYDONIA C. D. Meaney, Commanding
1941

H6709

<u>Vol. No.</u>	<u>Date</u>	<u>Day Letter</u>	<u>No. of</u> <u>Positions</u>	<u>No. of</u> <u>Soundings</u>	<u>Statute Miles</u> <u>Sounding Lines</u>
	1941				
1	Nov. 1	A	38	527	29.3
1	" 4	B	43	617	37.3
1	" 5	C	75	1137	70.7
2	" 5	C	80	1212	77.0
2	" 6	D	63	1163	69.0
3	" 6	D	38	650	40.0
3	" 7	E	98	1696	112.8
4	" 7	E	21	363	21.0
4	" 8	F	106	1820	115.0
5	" 9	G	165	2498	154.1
6	" 9	G	8	111	6.5
6	" 10	H	135	2221	146.0
7	" 10	H	8	181	11.5
7	" 11	J	153	2126	132.0
8	" 11	J	32	595	36.0
8	" 21	K	75	1351	87.3
8	" 23	L	26	370	19.5
9	" 23	L	85	1419	81.6
9	" 24	M	43	998	64.6
10	" 24	M	19	343	20.4
10	" 26	N	113	2019	121.9
11	" 26	N	16	359	21.5
11	" 27	P	91	2004	127.8
12	" 27	P	53	793	32.6
12	" 28	Q	86	1449	88.5
13	" 28	Q	28	506	27.8
13	" 29	R	78	1499	94.0
13	Dec. 5	S	14	291	20.0
14	" 5	S	17	252	16.0
14	" 6	T	5	54	3.6
14	" 16	U	15	203	19.7
14	" 19	V	63	1223	42.9
TOTALS			1888	32050	1949.9

TIDAL DATA

HYDROGRAPHIC SHEET REGISTER NO.H6709
Project HT-240 So. Carolina Coast
Ship LYDONIA C. D. Meaney, Commanding
1941

The automatic tide gage located at Charleston, South Carolina was used as the reference station for the reduction of all soundings on this sheet.

In accordance with the Director's letter of December 10, 1941, Ref. 36-FLM, the tides were assumed to occur one hour earlier than at Charleston, with a range factor of 0.8.

The datum plane of Mean Low Water corresponded to a reading of 2.3 feet on the staff.

ADDENDUM

SHEET H * 6709

DISCREPANCIES:

There are no apparent serious discrepancies on this sheet. ✓

CHANNELS:

No channels were developed on this sheet. ✓


DANGERS:

No dangers were developed on this sheet. ✓

JUNCTIONS WITH CONTEMPORARY SURVEYS:

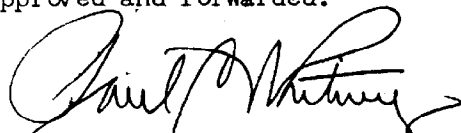
This sheet joins H-6710 on the north and H-6722 on the south. ✓

Respectfully submitted,


Isadore M. Zeskind
Associate Cartographic Engr.

Norfolk, Virginia
January 15, 1943

Approved and forwarded.


Paul C. Whitney
Supervisor, SE District

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. **H6709**

Records accompanying survey:

Boat sheets **.1**...; sounding vols. **14**...; wire drag vols. **0**...;
 bomb vols. **.4**...; graphic recorder rolls **0**...;
 special reports, etc. **None**.....

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	.. 1888
Number of positions checked	... 53
Number of positions revised 2
Number of soundings recorded	320 50
Number of soundings revised (refers to depth only) 37
Number of soundings erroneously spaced 74
Number of signals erroneously plotted or transferred 0
Topographic details	Time 0
Junctions	Time 4
Verification of soundings from graphic record	Time

Verification by **J.A.M. McCormick** Total time **.62 hrs.** Date **May 20, 1943.**

Review by **J.A.M. McCormick**..... Time **.6 hrs** Date **May 21, 1943.**

H6709

	Remarks	Decisions
1		0.2.6.0
2		
3		330793 0.2.6.0
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10	Location of tide staff	
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GEOGRAPHIC NAMES

Survey No. **H 709**

Name on Survey	On Chart No.		On previous survey No.		On U. S. quadrangle Maps		From local information		On local Maps		P. O. Guide or Map		Rand McNally Atlas		U. S. Light List	
	A,	B,	C,	D	E	F	G	H	K							
<u>South Carolina</u>																1
Atlantic Ocean																2
<u>Cape Romain</u> (for title only)																3
																4
																5
																6
																7
																8
																9
<u>Charleston</u>																10
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Names underlined in red approved
by L.H. Beck on 5/22/43

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
PHOTOSTAT OF

No. H
No. T

H6709

received **Jan. 20, 1943**
registered **Jan. 20, 1943**
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
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90			

RETURN TO

82	K&W.Knox
----	---------------------

VRW

pac
MR

TIDE NOTE FOR HYDROGRAPHIC SHEET

January 24, 1943.

~~Division of Hydrography and Topography:~~

✓ Division of Charts: Attention: Mr. H. R. Edmonston.

Tide Reducers are approved in
14 volumes of sounding records for

HYDROGRAPHIC SHEET 6709

Locality Atlantic Coast, Southeast of Cape Romain, S. C.

Chief of Party: C. D. Meaney in 1941
Plane of reference is mean low water reading
2.3 ft. on tide staff at Charleston (Time -1 hr; Range factor, 0.8)
10.9 ft. below B.M. 6

Height of mean high water above plane of reference is 4.1 feet.

Condition of records satisfactory except as noted below:

E. J. Green

Chief, Division of Tides and Currents.

DIVISION OF CHARTS

REVIEW SECTION - SURVEYS BRANCH

REVIEW OF HYDROGRAPHIC SURVEY REGISTRY NO. 6709 (1941)

Field No. 81

South Carolina; Offshore; Southeast of Cape Romain
Surveyed in November - December 1941; Scale 1:80,000
Instructions dated September 2, 1939 (LYDONIA)

Soundings: Dorsey Fathometer Control: R.A.R.

Chief of Party - C. D. Meaney
Surveyed by - C. D. Meaney
Protracted by - M. A. Axelton; E. Cunney
Soundings plotted by - M. A. Axelton
Verified and inked by - J. A. McCormick
Reviewed by - J. A. McCormick, May 21, 1943
Inspected by - H. R. Edmonston

1. Sounding Line Crossings

Agreement at crossings is, in general, very good.

2. Depth Curves

Satisfactory.

3. Adjoining Surveys

Small overlaps with H-6539 (1939-40) and H-6542 (1939) on the northeast show satisfactory agreement. Junctions with H-6710 (1941) on the north and H-6722 (1941) on the south will be considered in the reviews of those surveys.

4. Previous Surveys

- a. H-694 (1859), 1:300,000; H- 717 (1858), 1:300,000;
H-768 (1860), 1:500,000; H-3223 (1911), 1: 80,000

These surveys are typical of the early reconnaissance. Combined, they total less than a hundred soundings in the newly surveyed area. Allowing for inaccuracies in dead reckoning and line of position, the old soundings are consistent with those obtained in 1941.

- b. H-3761 (1914), 1:80,000; H-3762 (1914), 1:180,000;
H-4617 (1926), 1:100,000

These are the surveys previously considered basic for the area. H-3761 was controlled by visual fixes to a line of buoys approximately 15 miles offshore and from there out by dead reckoning. Agreement with the present survey is mostly good although there are indications that the dead reckoning was beginning to slip at the outer limits of the common area. There is little evidence of change in the submarine relief.

5. Comparison with Chart 1110 (New Print of 11-27-42)
Chart 1111 (New Print of 11-16-42)
Chart 1238 (New Print of 12-17-42)

Depths charted in this area are from surveys discussed in Par. 4b. They are superseded by the present survey. Navigational buoys doubling as survey buoys at the northern limits of the survey are indicated on H-6710 (1941).

6. Condition of Survey

Satisfactory.

7. Compliance with Instructions for the Project

Satisfactory.

8. Additional Field Work Recommended

When work is resumed in this area it may be necessary to run additional lines at the junction of the present survey with H-6722 (1941). This can better be determined when H-6722 is reviewed.

9. Superseded Surveys

H- 694 in part
H- 717 " "
H- 768 " "

H-3223 in part
H-3761 " "
H-3762 " "
H-4617 " "

Examined and approved:

Robert W. King
Chief, Surveys Branch

J. B. Borden
Chief, Division of Charts

Earl O. Heaton
Chief, Section of Hydrography

G. H. Hude
Chief, Division of Coastal
Surveys

Applied to Chart 787

" " " 1238
" " " 1110
" " " 1001

7/14/42

7/17/43

8/16/43

8/17/43

Q

Q

3.m.a.

3.m.a.

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